Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method of producing a superconductor wire, comprising the step of forming a superconducting layer on a base layer by performing a film deposition at least three times without substantially changing an oxygen gas pressure between the at least three times, wherein the oxygen gas pressure is below atmospheric pressure, wherein a film thickness of a superconducting film made in each film deposition is 0.3 μm or less and the superconducting layer having a layer thickness of ~~0.75~~ 1.5 μm to 3 μm is formed on the base layer and wherein the base layer is composed of a substrate or composed of the substrate and a buffer layer disposed thereon, wherein in either case, a portion of the base layer adjacent to the superconducting layer has a biaxial orientation, the substrate is composed of Ni, Cr, Mn, Co, Fe, Pd, Cu, Ag, Au or an alloy composed of at least two of Ni, Cr, Mn, Co, Fe, Pd, Cu, Ag or Au and the buffer layer is composed of a metal oxide containing at least one metal element having a crystal structure a pyrochlore-type, a florite-type, a rock salt-type, or a perovskite-type.

2. (Cancelled).

3. (Previously Presented) The method according to claim 1, wherein a supply area velocity of the base layer in each film deposition is at least $0.04m^2/h$.

4. (Currently Amended) A superconductor wire comprising a superconducting layer formed by performing film deposition on a base layer at least three times without substantially changing an oxygen gas pressure between the at least three times, wherein the oxygen gas pressure is below atmospheric pressure, wherein the superconducting layer has a layer thickness in a range of ~~0.75~~ 1.5 μm to 3.0 μm, a film thickness of a superconducting film made in each film deposition being 0.3 μm or less and wherein the base layer is composed of a substrate or composted of the substrate and a buffer layer disposed thereon, wherein either case, a portion of the base layer adjacent to the superconducting layer has a biaxial orientation, the substrate is composed of Ni, Cr, Mn, Co, Fe, Pd, Cu, Ag or Au or an alloy of

at least two of Ni, Cr, Mn, Co, Fe, Pd, Cu, Ag or Au and the buffer layer is composed of a metal oxide containing at least one metal element having a crystal structure a pyrochlore-type, a florite-type, a rock salt-type, or a perovskite type.

5. (Previously Presented) The method according to claim 1, wherein the oxygen gas pressure is-maintained at approximately 200 mTorr during the at least three times of the film deposition and between the at least three times.

6. (Previously Presented) The method according to claim 1, wherein the film deposition is stopped between each of the at least three times of performing the film deposition.

7. (Previously Presented) The superconductor wire according to claim 4, wherein a supply area velocity of the base layer in each film deposition is at least $0.04m^2/h$.

8. (Previously Presented) The superconductor wire according to claim 4, wherein the oxygen gas pressure is maintained at approximately 200 mTorr during the at least three times of the film deposition and between the at least three times.

9. (Previously Presented) The superconductor wire according to claim 4, wherein the film deposition is stopped between each of the at least three times of performing the film deposition.

10. (Original) A method of producing a superconductor wire according to claim 1 wherein the critical current is at least 250 A/cm in width wherein the number of times of film deposition is in the range of 5 to 12.

11. (Original) A superconductor wire of claim 4, wherein the critical current is at least 250 A/cm in width wherein the number of times of film deposition is in the range of 5 to 12.